CC2

SOUTH LAKE UNION -DOWNTOWN

DRAFT

Corridor Overview

Length: 1.1 miles

New Track Length: 2.4 signal-track miles (rail only)

Stations: King St Hub, 4th/5th Ave - James St, Madison St, University St, Union St, Westlake Hub, Westlake Ave - Virginia St, Blanchard St, Denny Way, Thomas/ Harrision St, Republican St, Mercer St, Valley St - Terry Ave/Boren Ave, Fairview Ave N - Aloha St

Average Stop Spacing: 1,100 feet

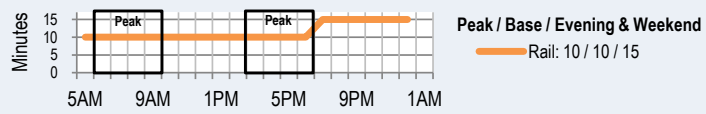
Key Connections:

- King Street Hub
- Financial District Station
- Pioneer Square Station
- Westlake Hub

Service Restructuring

- Rail placement on 4th and 5th would be designed to limit impact on regional bus service.

Operating Plan Headway by Mode



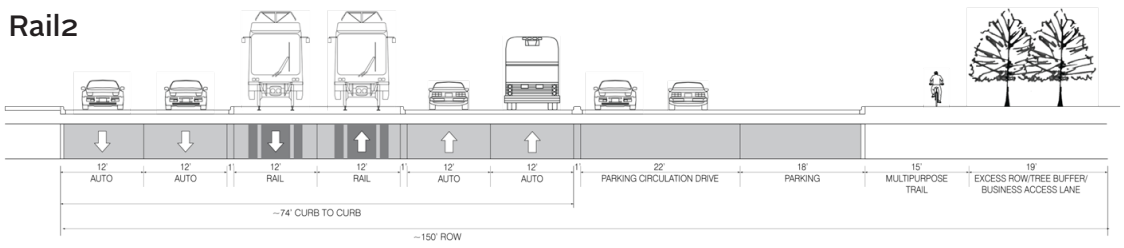
Cross Sections

Segment A

Existing SLU segment: This existing South Lake Union segment's curb-lane orientation on Westlake is not ideal from a speed/reliability standpoint, but using the existing trackway would be much less expensive than a center-running trackway as described for 1st Avenue and/or combining both tracks on Westlake north of Terry (Ithe 'streetcar couplet'). The Valley Street segment has not been examined in light of the proposed re-configuration of Valley with the Mercer East project, but the current north side-running configuration could be preserved even if the Terry track is moved to Westlake.

Rail1 Existing SLU streetcar configuration north of Virginia St

Rail2



Segment B1

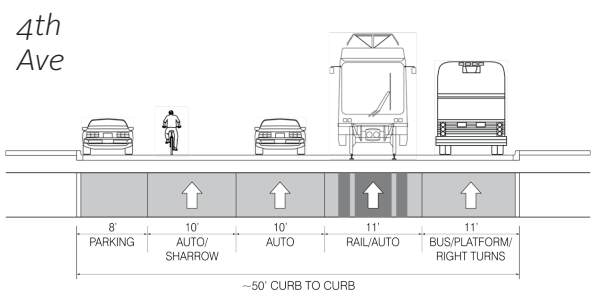
Segment B2

4th/5th Couplet: 4th will remain an important regional bus corridor; it has significant turning volumes at some cross-streets. Placing a rail circulator/ streetcar line on the west side of 4th replaces conflicts with regional buses and I-5-bound turning traffic. An option to mitigate impacts to the 4th Ave bi-cycle lane is to construct a two-way 'cycle track' on 2nd Ave. Northbound rail would return to the existing SLU alignment via Virginia.

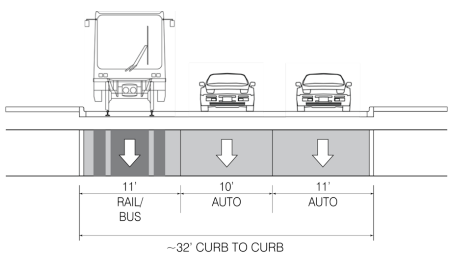
5th Avenue is only 3 lanes wide in the northern part of downtown; rail is proposed for the west curb lane (right turning vehicles could delay rail vehicles at some locations).

Rail

4th Ave

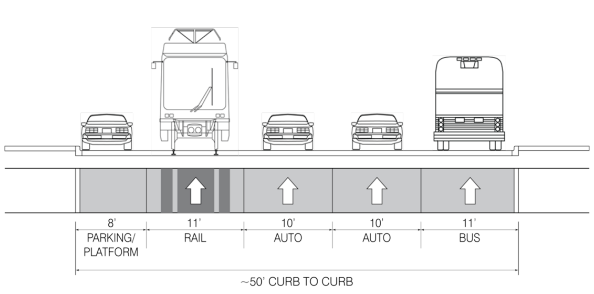


5th Ave

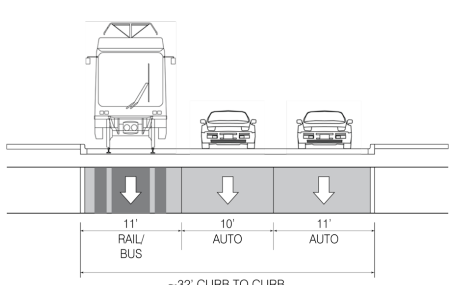


Rail

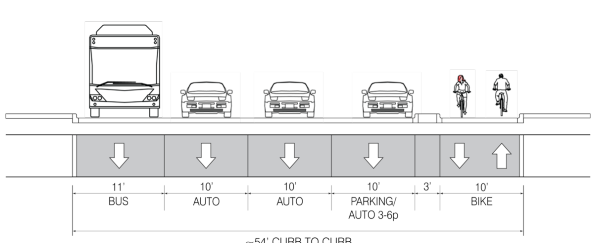
4th Ave



5th Ave



2nd Ave



BRT Operates in exclusive lanes on 3rd Avenue

Note: All cross sections are representative of a possible design option for a corridor segment. Right-of-way widths, utility constraints, and competing street use needs vary in each of the representative segments.

CC2: COMPARATIVE MEASURES

SOUTH LAKE UNION -DOWNTOWN

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Weekday Riders (2030)

Rail

up to 11,500 Riders
(Net New Riders - 7,200 Riders)

Productivity (Weekday Riders per Revenue Hour)

Rail

155 Riders/Hour

Annual Operating Cost (Operating Cost per Boarding Ride)

Rail

$5 million
($1.20)

Net Operating Cost per Net New Ride
(Accounts for Service Restructuring and Consolidation Opportunities)

Rail

$1.10

Total Capital Costs (and Cost per Mile)

Rail

$74 million
($67 million per mile)

Annualized Cost per Rider (Operating and Capital)

Rail

$2.55

End-to-End Travel Time Savings
(Average Savings per Ride including In- and Out-of-Vehicle Time)

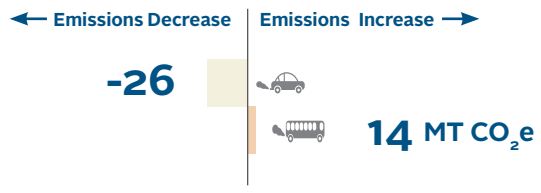
Rail

0 Minutes

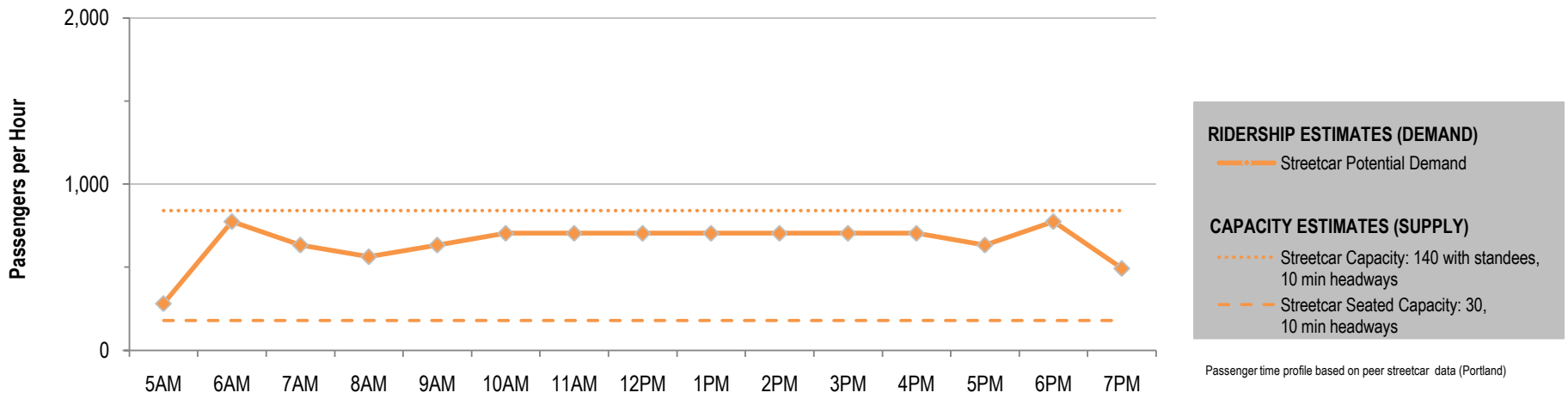
Annual GhG Savings

Personal vehicle
Transit

Rail



Vehicle Capacity Requirement (Estimated Bidirectional Demand by Mode vs. Capacity by Vehicle Type)



Passenger time profile based on peer streetcar data (Portland)

Note: Methodology sheet describes purpose and methodology for each measure. All cost estimates are presented in 2011 dollars.